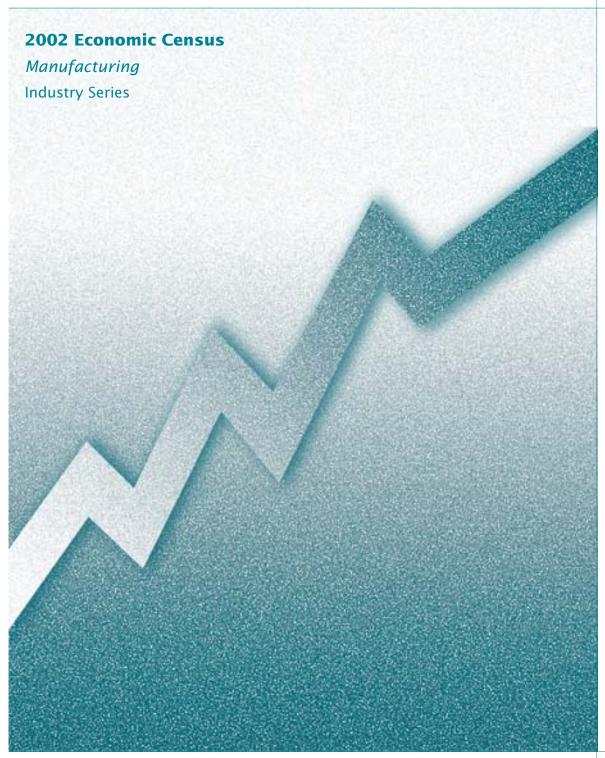
# Electronic Coil, Transformer, and Other Inductor Manufacturing: 2002

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### Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

		All	All em	ployees	Production workers				Total	Total	Total capital
Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	estab- lish- ments <sup>3</sup>	Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
334416, Electronic coil, transformer, and other inductor manufacturing	332 N N N N 426	355 N N N N 448	11 157 15 342 17 282 17 052 19 034 18 999	324 939 426 762 463 522 429 551 467 118 450 514	8 092 11 254 13 194 13 184 14 747 14 784	15 870 21 394 26 061 25 511 29 178 29 613	176 727 232 338 273 672 249 608 267 434 261 187	657 492 951 683 1 089 475 865 949 956 850 936 268	483 562 558 450 632 705 545 592 554 693 589 896	1 147 879 1 512 808 1 700 624 1 405 827 1 507 616 1 524 064	32 101 28 414 52 362 50 304 58 130 36 859

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

		All establi	ishments <sup>2</sup>	All em	ployees	Pr	oduction wor	kers				
Industry and geographic area	E¹	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
334416, Electronic coil, transformer, and other inductor manufacturing												
United States. California Connecticut Florida Illinois Indiana Massachusetts Michigan New Hampshire New York Texas Washington Wisconsin	1 2 3 1 - 1 2	355 68 17 17 40 10 15 11 7 32 17 7	157 26 8 6 23 6 3 5 4 17 6 4	11 157 1 492 453 442 1 290 470 232 200 469 1 371 353 277 352	324 939 46 610 11 880 10 812 35 797 12 335 7 966 7 436 15 520 37 573 11 596 9 642 11 808	8 092 1 067 385 369 967 345 169 143 279 1 040 236 142	15 870 1 983 766 745 1 830 504 332 409 610 2 098 516 267 441	176 727 24 989 7 828 6 889 20 108 6 006 4 231 3 715 7 336 21 381 5 118 3 331 4 574	657 492 89 715 19 129 20 877 66 804 28 856 14 641 12 438 27 877 70 195 30 532 33 969 21 673	483 562 46 825 10 529 13 156 42 885 20 893 9 186 9 544 14 368 18 880 29 049 60 943 15 632	1 147 879 137 266 29 646 34 081 109 510 48 686 25 415 22 244 43 306 88 664 60 555 94 706 37 874	32 101 2 928 917 929 3 100 1 647 518 542 547 2 339 2 312 475 413

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

## Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
334416, Electronic coil, transformer, and other inductor manufacturing	
Companies <sup>1</sup>	332
All establishments <sup>2</sup>	355 198 134 23
All employees³         number           Total compensation         \$1,000           Annual payroll         \$1,000           Total fringe benefits         \$1,000	11 157 389 813 324 939 64 874
Production workers, average for year	8 092 8 288 8 307 8 005 7 750
Production worker hours	15 870 176 727
Total cost of materials         \$1,000.           Materials, parts, containers, packaging, etc., used         \$1,000.           Resales         \$1,000.           Purchased fuels         \$1,000.           Purchased electricity         \$1,000.           Contract work         \$1,000.	483 562 386 185 77 036 1 807 7 126 11 408
Quantity of electricity purchased for heat and power     1,000 kWh.       Quantity of electricity generated less sold for heat and power     1,000 kWh.	101 302
Total value of shipments         \$1,000           Primary products value of shipments         \$1,000           Secondary products value of shipments         \$1,000           Total miscellaneous receipts         \$1,000           Value of resales         \$1,000           Contract receipts         \$1,000           Other miscellaneous receipts         \$1,000	1 147 879 998 863 36 351 112 665 106 560 2 577 3 528
Primary products specialization ratio percent. Value of primary products shipments made in all industries \$1,000. Value of primary products shipments made in this industry \$1,000. Value of primary products shipments made in other industries \$1,000.	96 1 237 379 998 863 238 516
Coverage ratiopercent	81
Value added\$1,000	657 492
Total inventories, beginning of year         \$1,000.           Finished goods inventories         \$1,000.           Work-in-process inventories         \$1,000.           Materials and supplies inventories         \$1,000.	181 321 61 941 26 316 93 064
Total inventories, end of year         \$1,000           Finished goods inventories         \$1,000           Work-in-process inventories         \$1,000           Materials and supplies inventories         \$1,000	159 142 54 251 27 181 77 710
Gross value of depreciable assets (acquisition costs) at beginning of year         \$1,000           Total capital expenditures (new and used)         \$1,000           Buildings and other structures (new and used)         \$1,000           Machinery and equipment (new and used)         \$1,000           Automobiles, trucks, etc., for highway use         \$1,000           Computers and peripheral data processing equipment         \$1,000           All other expenditures for machinery and equipment         \$1,000           Total retirements         \$1,000           Gross value of depreciable assets at end of year         \$1,000	394 979 32 101 2 017 30 084 1 013 2 166 26 905 38 636 388 444
Depreciation charges during year	27 440
Total rental payments	17 471 12 721 4 750
Total other expenses <sup>4</sup> \$1,000.  Response coverage ratio <sup>5</sup> percent.  Repair and maintenance services of buildings and/or machinery <sup>4</sup> \$1,000.  Communications services <sup>4</sup> \$1,000.  Legal services <sup>4</sup> \$1,000.  Accounting, auditing, and bookkeeping services <sup>4</sup> \$1,000.  Advertising and promotional services <sup>4</sup> \$1,000.  Expensed computer hardware and supplies and purchased computer services <sup>4</sup> \$1,000.  Refuse removal (including hazardous waste) services <sup>4</sup> \$1,000.  Management consulting and administrative services <sup>4</sup> \$1,000.  Taxes and license fees <sup>4</sup> \$1,000.  All other expenses <sup>4</sup> \$1,000.	61 512 73 5 637 2 776 1 429 1 573 2 960 2 270 823 3 677 4 263 36 104

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
2Includes establishments with payroll at any time during the year.
3Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.
4Based on Annual Survey of Manufactures (ASM) sample data.
5A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

			All emp	oloyees	Pi	roduction worke	rs		Total	Total	Total
Employment size class		All estab- lish- ments <sup>2</sup>	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	capital expendi- tures (\$1,000)
334416, Electronic coil, transformer, and other inductor manufacturing											
All establishments	-	355	11 157	324 939	8 092	15 870	176 727	657 492	483 562	1 147 879	32 101
1 to 4 employees	9 7 3	97 41 60	210 274 826	6 600 9 548 27 964	166 206 557	321 430 1 168	3 904 5 036 13 503	11 997 18 782 57 014	6 380 10 964 29 858	18 612 29 748 87 045	1 269 2 045 2 906
20 to 49 employees	- -	77 57	2 278 3 818	63 401 108 579	1 660 2 864	3 422 5 370	34 438 63 980	157 748 206 091	126 171 100 683	282 583 308 540	5 474 14 890
100 to 249 employees	_	22 1	h e	D D	D D	D D	D D	D D	D D	D D	D D
500 to 999 employees	_	_	_	_	_ _	_	_	_ _	_ _	_	_
2,500 employees or more  Administrative records <sup>4</sup>	9	124	497	16 150	390	763	9 135	29 490	15 856	45 344	3 280

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All estab- lish- ments <sup>1</sup>	All em	ployees	Pı	oduction work	ers		Total	Total	Total capital
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
334416	Electronic coil, transformer, and other inductor manufacturing	355	11 157	324 939	8 092	15 870	176 727	657 492	483 562	1 147 879	32 101
3344160	Electronic coils, transformers, and other inductors	355	11 157	324 939	8 092	15 870	176 727	657 492	483 562	1 147 879	32 101

<sup>&</sup>lt;sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

### Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

		Number of		Product shipments		
Product code	Product	companies with shipments of \$100,000 or more	Quantity of production for all purposes	Quantity	Value (\$1,000)	
334416	Electronic coil, transformer, and other inductor manufacturing	N N	X	X	1 237 379 1 622 026	
3344160	Electronic coils, transformers, and other inductors	N	X	×	1 237 379 1 622 026	
33441601	Electronic coils, transformers, and other inductors	N N	ŝ	ŝ	1 146 667	
3344160100	Electronic coils, transformers, and other inductors <sup>1</sup>	199 242	ŝ	ŝ	1 402 589 1 146 667	
3344160Y	1997 Electronic coils, transformers, and other inductors, nsk, total	242 N	ŝ	ŝ	1 402 589 90 712 219 437	
3344160YWW	Electronic coils, transformers, and other inductors, nsk, for nonadministrative-record establishments. 2002.	l N	^		47 802	
0044400\(\)	1997	N N	â	î x	136 667	
3344160YWY	Electronic coils, transformers, and other inductors, nsk, for administrative-record establishments	N N	X	X	42 910 82 770	

<sup>&</sup>lt;sup>1</sup>For additional detail, see Current Industrial Report MA334Q, Semiconductors and Electronic Components

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

# Table 6b. Product Class Shipments for Selected States: 2002 and 1997 [Not applicable for this report.]

# Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Delivered co (\$1,00	Quantity	Material consumed	Material code
		Electronic coil, transformer, and other inductor manufacturing	334416
386 18 489 9	X	Total materials	00900001
709 9 709 1 0	X X X	Tube blanks	32721203
2 10	x x	Printed circuit boards (without inserted components) for electronic circuitry	33441200
14 6	X	Printed circuit assemblies, loaded boards, and modules (printed circuit boards with inserted electronic components)	001900C4
2 8 <sup>-</sup> 5 2 <sup>-</sup>		Semiconductors (including transistors, diodes, rectifiers, and integrated circuits), for electronic circuitry	33441300
2 8 5 5 2 7	X X X	2002   1997   Capacitors for electronic circuitry   2002   1997	33441400
3 4		Resistors for electronic circuitry	33441500
1 8 12 0	X	All other miscellaneous components and accessories, for electronic circuitry (excluding tubes)	001900D3
7 8	X X X X	Silicon, hyperpure	32518835
		Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating,	33141911
1 2 1 2	X X X X	electrodes, etc.)	
11	X	Doped chemicals and other doped materials for electronic use	33141917
5 10 11 9	X	Ferrites (powder and paste)	33111107
6- 2 1	X	Metal powders	331000AA
2 10	\$	Electronic computer equipment	33411001
11 0 6 7	X X X X	Current-carrying wiring devices	33593101
0 7		Electronic communication equipment	33422001
3.	$\hat{x}$	Electrical instrument mechanisms and meter movements (including instrument relays)	33451501
2 3	X X X X	All other miscellaneous electrical measuring instruments and parts	33451503
,	â	1997	33431303
	X	Fractional horsepower electric motors (less than 1 hp)	33531211
6 6	X	Electrical transmission, distribution, and control equipment	001900B1
	X X X X	Loudspeakers, microphones, and tuners (all types)	33431005
	x	Glass and glass products (excluding windows and mirrors)	32720003
	X	Optical instruments and lenses (excluding sighting, tracking, and fire control)	33331401
3 19 4 8	X X X X	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc	32521105
8 1 8 8	X	Fabricated plastics products (excluding gaskets)	32610011
0 0	$\hat{x}$	Sheet metal products (excluding stampings)	332000A9
9 70 16 2	X X X X	Metal stampings	332000AC
5 1		Metal bolts, nuts, screws, washers, rivets, and other screw machine products	33272203
8 3 2 6	X X	1997 Other fabricated metal products (excluding forgings)	33200033
9 4	X X X	Forgings	33210000
		1997	
2 0	X X X	Castings, rough and semifinished	33100035
53 1 <sub>4</sub> 51 2	X	Steel shapes and forms (excluding castings, forgings, and fabricated metal products)	33120001
9 3: 15 5:	X	Copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	33142111
1 3	X X	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	33100038
4 0		Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products)	33100082
52 5 74 7	X X X	Insulated wire and cable (including magnet wire)	331000A7
14 3		Paper and paperboard containers (including shipping sacks and other paper packaging supplies)	32220017
8 1	X X X X	Resists (photosensitive resin films applied to the surface of a wafer)	32611305
1:	Ŷ	1997 Commodity gases	32512005
4	$\hat{x}$	1997	
	x x	Masks	32599217
	X X X X	Silicon chips	33141957
5	ŝ	Solvents	32510074

See footnotes at end of table.

# Table 7. Materials Consumed by Kind: 2002 and 1997—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
334416	Electronic coil, transformer, and other inductor manufacturing—Con.		
32561000	Cleaning compounds	X	139
00970099	All other materials and components, parts, containers, and supplies	Ŷ	87 106
00971000	Materials, ingredients, containers, and supplies, nsk .2002. 1997	X X	96 677 36 350 143 704

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.